

**Recommendations for Implementation of Harm Reduction Programming in Emergency
Care Settings**

by

Katherine J. Houston

B.S & B.A, University of Pittsburgh, 2011

Submitted to the Graduate Faculty of the
Graduate School of Public Health in partial fulfillment
of the requirements for the degree of
Master of Public Health

University of Pittsburgh

2022

UNIVERSITY OF PITTSBURGH

GRADUATE SCHOOL OF PUBLIC HEALTH

This essay was presented

by

Katherine J. Houston

It was approved by

Mackey R. Friedman, PhD, MPH, Assistant Professor, Infectious Diseases and Microbiology

Essay Advisor: Mary Hawk, Associate Professor, DrPH, LSW, Behavioral and Community
Health Sciences

Copyright © by Katherine J. Houston

2022

Recommendations for Implementation of Harm Reduction Programming in Emergency Care Settings

Katherine J. Houston

University of Pittsburgh, 2022

Abstract

Pennsylvania has some of the highest rates of overdose deaths in the United States and spends billions of dollars yearly on costs related to overdose deaths, lost productivity, preventable infections, treatment-related costs, and incarceration. Decades of research show the effectiveness of syringe service programs in improving health outcomes and cost reduction at all levels of the social-ecological model. Pennsylvania law prohibits syringe service programming from legally operating and has only two county-sanctioned programs within the commonwealth. Proposed legislation to legalize syringe service programs has been introduced in both the Pennsylvania House and Senate, but the proposed changes do not address questions about funding, access, and implementation, leaving concerns about the accessibility of programs for rural Pennsylvanians who inject drugs. This essay examines current laws, concerns of implementation, and proposes how emergency medical facilities can begin syringe distribution to increase syringe access for people who inject drugs (PWID) in rural communities.

PWID often use emergency medicine as a last resort for medical care. PWID experience stigma throughout their daily lives, and research shows that stigmatization by the medical community happens frequently. The medical community, particularly in emergency medical settings, should undergo comprehensive training on harm reduction education to destigmatize views on drug use, improve interactions with patients who use drugs, and how to effectively

discuss substance use and risk reduction measures prior to syringe distribution to ensure program success. These topics will allow for better provider-patient relationships, work to prevent compassion fatigue, lessen the frequency that PWID utilize emergency medicine, and build trust with PWID.

The public health significance of this paper is that little research has been conducted on implementing syringe distribution in emergency medical settings and no studies were found that emphasize educating emergency medical staff on harm reduction theories and practices. Research has shown the effectiveness of harm reduction programming and of compassion fatigue within the emergency medical communities, but no programs or research have examined how emergency medical settings could be utilized as the first point of introduction to harm reduction programming and education to improve health outcomes, reduce viral infections and fatal overdoses.

Table of Contents

Preface.....	viii
1.0 Introduction.....	1
1.1 Background.....	3
1.1.1 Impact of Injection Drug Use in Pennsylvania.....	3
1.1.2 Syringe Service Programs	5
1.1.3 Pennsylvania Law	7
1.1.4 Concerns of Syringe Access for Rural Pennsylvanians Who Inject Drugs	10
1.1.5 What is Harm Reduction?.....	13
1.1.6 Gaps in Efforts by Emergency Medical Facilities.....	15
1.1.7 Stigmatizing Interactions with Medical Providers	17
2.0 Recommendations.....	20
2.1 Engaging Staff of EMF	20
2.2 Community Engagement	22
2.3 Building Trust with PWID	23
2.4 Education of EMF Staff.....	25
2.5 Flow of Operations	27
2.6 Sustainability.....	29
3.0 Conclusions.....	32
4.0 Figures.....	34
Bibliography	35

List of Figures

Figure 1 Prevention Point Pittsburgh Risk Reduction Questionnaire.....	34
---	-----------

Preface

I would like to thank Dr. Mary Hawk for her guidance, expertise, and open ears. She helped me in so many ways, and always encouraged me to ask for what I need, a lesson I'm still learning. I have always felt heard and seen when working with Dr. Hawk, an invaluable and rare quality to possess. Thank you to all my coworkers at Prevention Point Pittsburgh, particularly my favorite queer Gabby, for your patience as I worked to juggle both school and work, for your compassion and kindness, and for teaching me something new every day. I would also like to thank all the people in my intensive outpatient group and Zoloft for helping me to make it to 2022.

I'd like to dedicate this essay to Ron Johnson, the first person to teach me about harm reduction. I miss you so much. I'd also like to dedicate this essay to Andree, Brandon, Kenny, Chris, and Nique, you were all gone too soon. Finally, I would like to dedicate this essay to all the people who wake up every day and decide to continue to do the work, because it is hard, sometimes thankless, but oh so worth it.

1.0 Introduction

The United States is amid an overdose epidemic with over 100,000 deaths recorded from April 2020 to April 2021, the highest recorded number in the country's history and a 28.5 % increase in the number of deaths from the year prior ("Drug Overdose Deaths in the U.S. Top 100,000 Annually," 2021). Drug overdose is one of the leading causes of death in the United States, with the death toll having more than tripled since 1990 (Samuels et al., 2016). The DEA found that fentanyl was found in 67% of drug overdose deaths in 2017, marking a 400% increase from 2015, with fentanyl continuing to be the primary driver of overdose deaths in the nation ("The Opioid Threat in Pennsylvania," 2018).

For decades, drug use has been viewed as a moral failing, which is reflected in the use of law enforcement and the carceral system as the primary tools to combat "the war on drugs." This war on drugs is a war on people. You cannot fight a war against an object, and those on the losing end of this war are people who use drugs and the people who love them. This viewpoint of drug use works towards removing the bodily autonomy of people who use drugs (PWUD) and ignores that drug use has taken place since the beginning of humankind, stifling the adoption of evidence-based practices, primarily those centered around harm reduction.

The adoption of abstinence-based programming and education, forcing individuals to choose between forced treatment or incarceration, and the crackdown on drugs entering the country has led to the extreme number of overdose deaths. The drug supply is poisoned throughout North America, with reports of opioids and non-opioids being tainted with fentanyl, making drug consumption more dangerous than ever before. Many government officials, public health experts,

and advocates are pushing for the adoption of harm reduction practices to slow down preventable overdose deaths and to support PWUD in ways that are manageable, effective, and centered around an individual's desire for any positive change.

Pennsylvania consistently has some of the highest rates of overdose and is in the top 10 states for the prevalence of chronic Hepatitis C infection with injection drug use being a primary risk factor for contraction of the virus (Orkis et al., 2020). State law prohibits syringe service programs (SSPs) from operating in PA, a proven intervention to reduce overdose death and blood-borne infections. This paper examines current Pennsylvania law and how it prevents the implementation of evidence-based programming to improve health outcomes for PWUD, existing literature on the stigmatized experiences of PWUD seeking medical care, an overview of harm reduction and syringe service programming, as well as concerns for rural Pennsylvanians who inject drugs as it relates to healthcare and sterile supply access. The paper then examines gaps in emergency medical services for people who inject drugs (PWID). The reader will find information regarding negative health outcomes for PWID as the result of existing law and stigma, with a focus on Pennsylvania. Finally, the paper will list recommendations to effectively implement syringe distribution in emergency medical facilities (EMF) to increase syringe access for rural Pennsylvanians by focusing on harm reduction education and stigma reduction within the emergency medical community.

Innovative harm reduction programming must be implemented, and state law must be changed to effectively reduce the number of overdose deaths. No current literature could be found discussing syringe distribution in hospital and emergency medical facility settings to supplement the lack of access to syringes and harm reduction programming in more rural areas.

1.1 Background

1.1.1 Impact of Injection Drug Use in Pennsylvania

The state of Pennsylvania is currently in the midst of an overdose crisis, primarily from the local heroin supply being laced and/or supplanted with fentanyl throughout all its counties. In 2017, 5,456 residents of Pennsylvania lost their lives due to an overdose death, a 64% increase from the number of lives lost in 2015 (“DEA Announces 5,456 Drug-Related Overdose Deaths in Pennsylvania in 2017,” 2018) Additionally, the DEA states that fentanyl was found in 67% of 2017 deaths, marking a 400% increase from 2015 (“The Opioid Threat in Pennsylvania,” 2018). The 2017 numbers marked the highest number of recorded overdose deaths nationally. In 2018 there was a decrease in overdose deaths nationally, with a decrease in Pennsylvania of 4,491 drug-related overdose deaths (overdosefreepa.pitt.edu, 2022). Individuals working with people who use drugs (PWUD) around the state were hopeful that this trend would continue due to the statewide naloxone distribution efforts led by Pennsylvania government officials, NGOs, and small grassroots programs. The downward trend of overdose deaths in Pennsylvania and nationwide ended as the COVID-19 pandemic became the primary public health concern as individuals were faced with the difficulties of isolation. Unfortunately, 2020 marked a 14% increase in the number of overdose deaths as compared to 2019 with 5,097 Pennsylvanian lives lost. Eighty-five percent of these deaths were opioid-related, and 75% of the deaths involved fentanyl. Pennsylvania ODSMP, 2022).

The healthcare costs associated with opioid use disorder (OUD) are continually on the rise, with an estimated \$53.77 billion dollars spent in Pennsylvania in 2016 alone, including healthcare

costs, substance use treatment (\$162 million), costs associated with the incarceration of PWID (\$440 million), and productivity loss (\$1.1 billion) (“The Opioid Threat in Pennsylvania,” 2018). Approximately \$50.5 billion dollars related solely to costs surrounding overdose fatalities.³ Fifty-two percent of the deaths in 2020 were made up of people between the ages of 25 to 44 (“Fatal and non-fatal drug overdoses in Pennsylvania,” 2020). There is also a racial disparity in Pennsylvania in terms of overdose deaths, with 19.3% of deaths in 2020 comprised of Black Pennsylvanians, despite Black persons comprising only 12% of the state’s population (Pennsylvania ODSMP, 2022). The trend of racial disparities in overdose deaths has been consistent between 2019 to 2021 (“Opioid Overdose Deaths by Race/Ethnicity, 2022).

For those living with opioid substance use disorder, fears of overdose are only one of many concerns due to the lack of resources within Pennsylvania. In the state, syringes are presently illegal paraphernalia (discussed in detail in section 1.1.3), making access to sterile syringes extremely difficult. Repeated use and sharing of syringes can lead to the rapid spread of infectious diseases such as HIV and HCV as well as debilitating bacterial infections such as endocarditis and abscesses. Following the 2015 HIV outbreak in Scott, Indiana, where 235 individuals contracted HIV, primarily due to sharing of injection equipment, the CDC conducted a nationwide vulnerability assessment to see what areas of the United States had the potential for a similar outbreak of bloodborne infections. Three of the top 220 counties found to be at the highest risk nationwide were found in rural Pennsylvania: Luzerne, Cambria, and Crawford. Research shows that the Scott, Indiana outbreak could have been prevented if the state implemented syringe service programs (SSPs) earlier after seeing an HCV outbreak in 2010 (Short et al., 2020).

1.1.2 Syringe Service Programs

SSPs were first developed in the 1980s as a response to the discovery of HIV to help prevent the spread of HIV and other blood-borne diseases (Strathdee & Vlahov, 2021). Syringe service programs have been implemented worldwide and over three decades' worth of research shows the effectiveness of syringe distribution in decreasing rates of blood-borne infections amongst people who inject drugs.

SSPs have been shown to improve other health outcomes for PWID towards less chaotic drug use. Research shows that individuals utilizing services at an SSP are five times more likely to enter a rehabilitation program for substance use disorder (SUD) than those who do not utilize such programs and three times more likely to stop drug use (“Summary of Information on The Safety and Effectiveness of Syringe Services Programs (SSPs), 2019”). Additionally, SSPs distribute hundreds of thousands of doses of naloxone (the opioid overdose-reversing medication) directly to people who use drugs, who are the people most likely to be at the scene of an overdose. A 2019 survey conducted by the North American Syringe Exchange Network found that 237 SSPs conducting naloxone in North America distributed 702,232 doses of naloxone in a 12-month period (Lambdin et al., 2020). Syringe distribution, safer injection education, and harm reduction as a concept were created by PWUD and PWID. Similarly, early advocacy efforts to make naloxone accessible to lay people were led by PWUD to their comrades and community members. Their activism has helped save the lives of thousands upon thousands of people who use drugs.

Literature shows that syringe service programs are a proven intervention to reduce the harms and negative health outcomes associated with injection drug use (IDU) by providing sterile injection equipment (syringes, dental cotton, tourniquets, sterile water, etc.), education

surrounding safer injection practices, and social supports that utilize a harm reduction model (Brooks, O'Brien, Salvalaggio, Dong, & Hyshka, 2019).

Harm reduction and syringe service programs are often labeled as controversial and enabling, despite the proven effectiveness of harm reduction efforts and of syringe service programs more broadly, due to the marginalized and stigmatized status of people who use drugs. Instead of using SSPs as a preventative measure, they are often implemented once communities have experienced outbreaks of HIV, Hep C, or begin to see high rates of heroin use in wealthier white communities, as evidenced by Indiana's response to the Scott County HIV outbreak of 2015. Former Vice President and State Governor Mike Pence made the executive order legalizing SSPs in Indiana, two months after the outbreak was discovered. He stated in the press conference announcing the order that "I will tell you, I do not support needle exchange as anti-drug policy, but this is a public health emergency" (Twohey, 2016). While controversial, research has proven time and time again that they are effective economically by lowering health care costs for the communities and efficiently lower rates of blood-borne illnesses and overdose deaths. Scott County had drastic reductions in rates of new HIV and Hepatitis C infections due to SSP operation. Despite the program's success, moral indignation has trumped public health measures and scientific facts. In June of 2021, Scott County commissioners voted 2-1 to end the program, leaving many concerned about the potential for a similar outbreak. NPR reported that around the time of the vote, commissioner Randy Julian referred to syringe service programs as "a welfare program for addicts" in a now-deleted Facebook post (Legan, 2021).

SSPs provide more than just sterile syringes. They are a place to access HIV and HCV testing and linkage to care, naloxone training and kits, safe syringe disposal, and referrals to other treatment providers ("Summary of Information on The Safety and Effectiveness of Syringe

Services Programs (SSPs), 2019”). Some programs are even able to offer medically assisted treatment on-site, such as Prevention Point Philadelphia’s STEP program where individuals are able to access buprenorphine and naltrexone in the SSP setting (STEP, 2022).

A 2019 study found that Prevention Point Philadelphia, the only legalized SSP in the eastern part of the state, saved Pennsylvania an estimated amount of \$234.4 million annually from 1993 through 2002 through averted HIV diagnoses (Feldman, 2019). This amounts to an estimated \$2.4 billion in savings for the Commonwealth over the ten-year period, primarily through conducting syringe service programming to PWID (Feldman, 2019). While the savings impact in rural communities will not be as high as in Philadelphia, the average lifetime cost associated with HIV treatment for a single person is \$229,800. The cost of a case of 500 syringes is less than \$50. The return on investment when comparing the costs associated with syringe distribution versus the cost of care for HIV and other preventable diseases is clear. Conducting syringe distribution is an investment for Pennsylvania.

1.1.3 Pennsylvania Law

Pennsylvania Statute 35 P.S. Health and Safety § 780-102 currently includes hypodermic syringes and needles on the drug paraphernalia list. By including syringes and needles, SSPs are unable to open across the state because they are by state law conducting illegal activity. In order to operate, local municipalities must pass their own sanctions to legally allow SSP operation. Presently, in the entire state of Pennsylvania, where an estimated 12.8 million people reside (U.S. Census Bureau Quick Facts, 2022) and despite its alarming overdose rates, there are only two legal syringe service programs, one in Pittsburgh in the western half of the state and the

other in Philadelphia in the east. The definition of drug paraphernalia according to state law includes any and all:

equipment, products and materials of any kind which are used, intended for use or designed for use in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, concealing, injecting, ingesting, inhaling or otherwise introducing into the human body a controlled substance in violation of this act (1972, Act 64).

All manners of harm and risk reduction supplies and tools are illegal in the eyes of current law, such as fentanyl test strips which can be used to test pills and powders to detect the presence of fentanyl, which are currently being found in non-opioid street drugs such as crack-cocaine (Cluster of Cocaine-Fentanyl Overdoses, 2018). Individuals using non-opioids typically do not expect their drugs to contain opioids and do not have a tolerance to opioids, putting them at increased risk for overdose death (Overdose Risks & Prevention, 2020).

Other supplies that are important to reduce health-risk specifically surrounding injection drug use are criminalized in this law, forcing PWID to engage in risky behaviors due to fear of criminalization and incarceration. Prevention Point Pittsburgh gives out an array of tools related to safer injection drug use, such as sterile water and dental cotton to be used as a filtration device. PWID need a filter and water source of some kind when preparing a shot and are often forced to use less than safe objects to aid them due to fear of being caught. For individuals who are houseless for example, injecting drugs in outdoor spaces creates a greater need to move quickly because the reality of being found by a non-drug user or law enforcement is much higher. Without access to a program such as Prevention Point Pittsburgh, PWID who are also houseless may resort to using a

bacteria-filled cigarette filter for filtration and a puddle as a water source. A puddle of water and a cigarette filter are more discrete and more easily accessible when compared to a vial of sterile water and dental cotton when SSPs and harm reduction more broadly are criminalized. The wide array of items listed as drug paraphernalia means that the more objects a person is found with that can be tied to the ingestion of a drug, the higher the number of counts they can potentially be charged with if found by law enforcement.

Pennsylvania enacted an amendment to the paraphernalia law with Act 139 in 2014 to provide legal protections to people who use drugs when calling 911 to seek medical assistance in case of overdose, colloquially known as the Good Samaritan Law or David's Law, specifically referring to Act 139 (2014 Act 139, 2014). The amendment was added as a measure to decrease the number of fatal overdoses by alleviating fears PWUD have of law enforcement responding to the scene of the overdose and more broadly, where drug consumption takes place.

People often share drugs with one another, be it a friend, romantic partner, or family member. Additionally, the majority of people who sell drugs are people who use drugs themselves, i.e., individuals who sell drugs to make ends meet and as means to access their own drug of choice, regardless of dependence on the drug. This act of communal ingestion, similar in many aspects to buying a friend a shot at the bar, is deemed criminal and outside the realm of protection by the Good Samaritan Law. There are countless stories since the law's inception of arrests and prosecution of PWUD who are at the scene of an overdose because they shared or supplied drugs with someone who died by overdose, despite calling to ask for help. Additionally, individuals who have overdosed and survived do not have immunity from prosecution when the person who called 911 is exempted from protections of Act 139.

Pennsylvania has bills in both the House and Senate (HB 2264 & SB926) that would change the current paraphernalia law to no longer include syringes or other objects involved in the ingestion of drugs when the purpose is to “reduce the risk of disease transmission or other harm, provided by a public or private entity, volunteer or health care provider through a syringe services program to a participant in the syringe services program” (Browne et al., 2021).

The federal government has set aside a significant portion of funds to be used to combat the opioid overdose crisis. The Substance Abuse and Mental Health Services Administration (SAMHSA) recently began accepting applications for grants specifically for Harm Reduction, with \$30 million allocated to the program over a three-year period (SAMHSA, 2021). This is the first-ever SAMHSA grant specifically made to fund harm reduction efforts. This is also the first time ever that federal dollars can be used to purchase syringes and other harm reduction supplies. One key eligibility requirement for the grant is proof of non-profit status. There are several programs throughout Pennsylvania that operate without legal protection due to current paraphernalia laws. Not only are those operating these programs at risk of legal repercussions for providing life-saving services, but they are also unable to access funding to support their programs because of their legal status.

1.1.4 Concerns of Syringe Access for Rural Pennsylvanians Who Inject Drugs

Geographically, 75% of Pennsylvania is rural, and the state’s population is comprised of 3.4 million people making up 27% of the state’s population (Kopko, 2021). Pennsylvania has the third-highest rural population in the US, and 48 of the state’s 67 are considered rural. Access to healthcare is limited in rural PA, with 2017 data estimating that there is one physician for every

1,387 residents as compared to one physician for every 775 residents in urban areas (Rural Quick Facts, 2022).

While rural counties had fewer overdose deaths when compared to urban areas in Pennsylvania, the rate of overdose deaths is significantly higher than the national average. From 2015 to 2017, there were 27.2 overdose deaths per 100,000 residents in rural Pennsylvania, as compared to the national rate of 20.7 deaths per 100,000 Americans in the same period (Rural Quick Facts, 2022).

For PWID living in rural Pennsylvania, access to sterile syringes and other harm reduction supplies is limited. There are several SSPs operating throughout rural Pennsylvania, but their number and reach are limited due to their illegal status and geographically, this small number of programs is unable to serve all rural Pennsylvanians when considering transportation issues experienced by many. Pennsylvania pharmacists have been able to sell syringes to individuals without a prescription since 2010 (PA DOS, 2010). However, many pharmacists will not sell syringes without a prescription. I work at Prevention Point Pittsburgh, one of the two legal SSPs in PA, and I hear reports from many program participants that pharmacies will not sell them syringes, increase syringe prices to be unobtainable for many PWID, and even sometimes report threats by pharmacists to call the police when an individual tries to purchase syringes, despite PWID simply trying to make a purchase for the betterment of their health and of the health of their communities. These stories come primarily from PWID in Pittsburgh, a city that has a history of liberal politics. I theorize that this phenomenon occurs more frequently for rural Pennsylvanians who inject drugs, where political leanings fall more conservatively and where access to a syringe service program is extremely limited.

With the potential for legislation passing legalizing SSPs in PA, there still leaves the question of who will run programs throughout the state, how funding will be secured so programs can continue to operate, and how syringe access for individuals with transportation instability can be increased, especially in a geographically large area without the same transportation opportunities such as buses and ride-sharing programs as their urban counterparts.

Foundational funding is difficult for rural communities because foundations are often geographically centered in urban settings, and typically use their capital to improve communities in their immediate surrounding areas. While SAMHSA has allocated \$30 million in grants for harm reduction programs, it is currently unclear how many programs will receive some of the funding. The overdose crisis has affected all of the United States, and many programs will be vying for this funding. Rural communities in need of syringe distribution and harm reduction programming will need to find other ways to ensure funding of these projects and programs.

PWID have high utilization of emergency medical facilities (EMF), such as emergency rooms, emergency first responders, and urgent care facilities due to the stigma experienced by the medical community at large (Vivolo-Kantor et al., 2018). PWID often seek medical care as a last resort in terms of infections and illness because they do not want to be treated poorly, be accused of drug-seeking, or have all medical attention focused on their substance use/the desire by medical providers to direct PWID to abstinence-only forms of recovery, thereby ignoring the primary reason the person needs medical care in the first place (Biancarelli et al., 2019). The fear of poor treatment by medical providers and limitations in medical care in rural communities leave many rural PWID engaging with (EMF) as their primary point of medical care. Focus should be placed on utilizing EMF as a touchpoint for engaging with PWID around safer injection practices, harm reduction techniques, and syringe distribution.

1.1.5 What is Harm Reduction?

Harm Reduction is a social justice movement built on the respect of and belief in the bodily autonomy of people who use drugs. It also refers to a practical set of strategies aimed at reducing the harms associated with drug use. Syringe distribution and harm reduction more broadly were a direct response by people injecting drugs and AIDS activists to the HIV epidemic in the 1980s. PWUD have been and continue to be one of the most stigmatized groups of people in the world. Harm reduction education and practices were developed by PWUD because no one else was going to do it for them. Public health officials, government officials, non-drug users for the most part did not care about their lives, and most non-drug users had views aligning with the idea that PWUD were below everyone else and that they deserved their fate. These ideas continue to this day and are reflected in the treatment of PWUD. The use of tough love, the idea people need to hit rock bottom before they will be ready for help, using forced treatment as an alternative to incarceration, even though forced treatment looks and feels a lot like being in jail, these are all examples of how society continues to treat PWUD as if their drug use is a moral failing. These ideas are even more dangerous today than ever before due to the increasing presence of fentanyl in our current drug supply. These ideas leave people isolated, putting them in potentially unsafe situations, forcing on periods of abstinence and thus lowering drug tolerance all create factors where people feel unworthy of help and at increased risk of fatal overdose.

Harm reduction allows for a different approach to substance use that creates room for compassion and centers the needs and desires of people who use drugs. Common phrases you will hear in the harm reduction world are “Any positive change” and “Meeting people where they’re at.” Any positive change means exactly what it is, any positive change is a good one. Examples of

any positive change in terms of injection drug use can be using a new syringe for every injection, boiling tap water and letting it cool down to room temperature instead of just using whatever comes out of the tap, injecting 5 times a day instead of 10. Harm reduction is about celebrating these changes, about working with one another to find other ways to be safer when using drugs, with finding trusted community members to discuss the hardships of using drugs and the treatment this community faces from the outside world. Harm reduction is about treating one another with compassion and care because history and experience has shown that the outside world is unwilling to provide that to PWUD.

People often refer to harm reduction as either Harm Reduction or harm reduction, with the big HR referring to the ideologies centering respect of PWUD and little hr to the set of practical practices to mitigate the harms associated with a specific set of behaviors, typically substance use. Both must be used and are best used together to create meaningful interactions and programming with PWUD. Centering the humanity for individuals makes for better interactions and creates an environment for honesty. Utilizing an incremental approach to lessening the harms associated with substance use is also much more manageable. To ask a human being to change all of a set of behaviors overnight is unreasonable, unrealistic, and in the case of drug use, extremely dangerous.

Harm reduction also allows for the recognition that substance use does not make up the entirety of a human being, and also frees us from the idea that abstinence is the only model that can be used for people with substance use disorders. Why is there such a firmly held belief that if someone has a chaotic relationship to heroin, they can also never ingest marijuana, that a dependence on one substance means an individual will have a dependence on all substances? Have you, dear reader, ever experienced a relationship to alcohol or tobacco that you wanted to change in some way? How did you change how you use that substance? And were you ever told or believed

that the only way to better your health was to eliminate your entire relationship to all substances because of this? Has your relationship to substances ever trumped all other aspects of your life in the eyes of those you interact with and to those you are looking for medical care? Imagine how frustrating and defeating it must feel to constantly be judged solely by your relationship to substances. The sole focus on substance use behaviors also prevents non-drug users from asking questions about why a person uses drugs. Is it due to pain, be that physical or trauma-based? Are substances used to create a sense of escapism from the difficulties of being a person in the world? Do substances allow you to feel a certain way you did not think possible? Harm Reduction allows us to ask these questions, to see PWUD as whole people, and to center the needs of PWUD to help them live the life they want to.

1.1.6 Gaps in Efforts by Emergency Medical Facilities

In researching for this paper, little existing literature or research was found that focuses on Emergency Medical Facilities (EMF) as a point of syringe distribution. One study from 1988 discusses syringe distribution in the UK with one distribution point being an emergency room, but distribution locations are randomized and there is little discussion on the methods of distribution, with no definitive discussion of the differences in implementation by distribution location (Stimson et al., 1988). A 2007 study compares syringe distribution in a hospital versus community settings in San Francisco, but the hospital syringe distribution took place outside of the emergency room and emergency staff were involved in the referral process with no syringe distribution taking place or safer education practices being conducted in this setting (Masson et al., 2007). As previously discussed, there is research over decades documenting that lack of access to sterile

supplies leads to increases in a wide variety of costly health issues, including HIV, Hepatitis A, B, and C, and endocarditis among other infections that lead to poor health outcomes for PWID (Palepu et al., 2001). Few studies examine the experiences of PWID who utilize emergency medical services, but research shows that PWID experience high levels of stigma when seeking care in the medical community (Ti & Kerr, 2013). PWID seeking services at EMF do receive some care such as naloxone prescriptions and naloxone leave behind programs when first responders arrive at the scene of an overdose. The City of Pittsburgh Emergency Medical Technicians (EMT) have also begun a pilot program where they begin buprenorphine induction on-site for interested parties as a first step towards lessening their injection drug use (City of Pittsburgh, 2021).

While these are valuable measures, they are not universally adopted throughout Pennsylvania and are still not universally adopted in the urban regions of the state. Not all first responders leave behind naloxone at the scene of an overdose, and there is stigma and compassion fatigue experienced by many first responders when being called to revive the same individual. There have been discussions that thankfully have never come to fruition that PWUD will only have a limited number of EMT visits related to overdose, that somehow a life is only worth saving a certain number of times. This conversation is one that takes place throughout the country by politicians and medical providers without a foundational knowledge of harm reduction. This recalls the 2 to 1 vote by Scott County commissioners to end the SSP that helped slow down the HIV outbreak within the community of PWID. One of the commissioners who voted to end the program said that "It's aggravating for a first responder to Narcan somebody, and this is one of the things I really struggle with is that there's no accountability," commissioner Mike Jones said during a recent meeting. "They walk out of the ER, there's no – nothing happens. I mean, nothing happens" (Legan, 2021). Instead of taking a moment to think critically about how PWID and PWUD are

engaged in care at EMF, Mike Jones' (and many others') response is that something is wrong with PWID, and that society should not have to deal with their moral shortcomings.

Emergency medical providers need to take a different approach with engaging PWUD and PWID who are seen for care. Current approaches are not working as evidenced by the continual increase in overdose deaths and healthcare costs attributed to overdose and substance use disorders. For example, when someone comes to the ER with an abscess, why are conversations not happening on best injection practices to prevent future abscesses, talking to see if people know proper vein care such as vein rotation, knowing what areas of the body present more potential danger when injecting (such as the neck), discussions about different forms of treatment such as MOUD as opposed to abstinence-based only treatment, or any questions at all how a patient uses drugs and what the patient is looking for in terms of risk reduction? Introducing syringe distribution in rural EMF is a first step toward improving health outcomes for rural Pennsylvanians who inject drugs. This innovative approach will help to reduce the number of overdose deaths, reduce healthcare costs associated with injection drug use, lower rates of fatal overdoses, and help to prevent outbreaks of HIV and Hepatitis C.

1.1.7 Stigmatizing Interactions with Medical Providers

The primary reason that PWID and PWUD do not seek regular medical care is the fear of stigmatizing treatment at the hands of medical providers. Research has shown that negative attitudes towards people who use drugs are more pervasive for medical providers than towards other highly stigmatized groups and that within the stigma of drug use, certain forms of drug use have stronger biases, such as injection drug use (Dhanani & Franz, 2021). PWUD report

stigmatization on a wide variety of issues. The pain of PWUD is often minimized when seeking medical care, with providers focusing on the fear that patients are “pill-seeking” leaving patients to experience high amounts of pain without any comfort. PWUD are treated as if they should have the ability to hold pain, either as a form of unconscious punishment for their moral failing or that they should be able to handle more pain due to their substance use. On the opposite side of the spectrum, there are misunderstandings of the need for higher doses of pain medication for PWUD due to an increased tolerance for opioids.

A qualitative study investigating the experiences of PWUD in emergency departments reported that a focus group participant stated, “I broke my nose a month and a half ago, and I fractured my orbital bone. They sent me home with acetaminophen 800 [mg] because I had heroin in my system...they don’t take it seriously” (Hawk et al., 2022). Another participant said that “I don’t need you all for narcotics. This ain’t where I’d go to get narcotics. This is where I go to get help the legal, the right, the way it’s supposed to be, the American way, but doctors and nurses and-when you walk in, and the first thing they do is look at you like you’re a dope fiend” (Hawk et al., 2022). The inability for many medical providers to listen to the needs of PWUD and not focus on internal biases towards drug use when providing medical care is a hindrance to PWUD seeking medical care. By focusing solely on drug use of patients, medical providers may overlook medical issues unrelated to substance use. Patients may not receive any care towards their primary issues. Additionally, utilizing an abstinence-based approach when providing care for PWUD wastes time. PWUD will not have their withdrawal symptoms magically disappear because a doctor told them they should stop using drugs. Instead, PWUD are forced to have uncomfortable interactions as they continue to feel sicker from withdrawal until they inevitably leave the medical facility because help has not been provided.

People who have overdosed or have called for help from emergency responders report stigmatizing behaviors from these providers. One study reported that a participant stated that “there was a time, not that long ago actually, [that I overdosed]-it was attempted suicide and I used heroin to do it.[...] Woke up, the paramedics were around me and I heard a cop-he didn’t know I could hear him-but he said, ‘You should have just let the junky bitch die” (Ondocsin et al., 2020). Additional research suggests that medical providers in rural settings have greater biases towards PWUD than their urban counterparts, potentially leading to increased barriers to individuals residing in rural areas (Franz et al., 2021). Utilizing harm reduction will create better relationships between providers and patients, helping to destigmatize patients who use drugs, and improve health outcomes for patients. Better patient relationships should also alleviate some compassion fatigue felt by medical providers.

2.0 Recommendations

The following recommendations are designed to be used in emergency medical facilities in rural Pennsylvania to improve health outcomes and increase access to harm reduction programming for rural PWID. Current access is extremely limited, and there are questions about how access will increase if current legislation passes. While these recommendations are made specifically with rural EMF in mind, they can be used in more urban areas to increase syringe access more broadly.

By working with EMF to accept and understand harm reduction approaches as well as engage in syringe distribution and injection education, PWID will be given the tools they need to reduce harms during active periods of drug use. Research has shown that people who use services at an SSP are five times more likely to enter a rehabilitation program, implying that the number of PWID living in rural communities who are engaged in recovery services, such as in-patient treatment or induction of methadone or buprenorphine will increase due to utilization of harm reduction programming in EMF.

2.1 Engaging Staff of EMF

Staff of emergency medical facilities must have a strong foundational understanding of harm reduction basics and of the benefits of harm reduction practices to provide effective, non-stigmatizing syringe distribution and to improve health outcomes of PWID. These practices can

be adopted throughout PA in more urban areas as well to increase access and would be a good opportunity to create more meaningful partnerships between EMF and existing syringe service programs.

A great strength of EMF staff is their medical training. They have a foundational knowledge of potential harms associated with improper injection techniques and the ability to provide education on best practices for injection to prevent infections such as endocarditis. Harm reduction is also aligned with the medical code of ethics. The AMA principles of medical ethics lists that physicians:

shall be dedicated to providing competent medical care, with compassion and respect for human dignity and rights...recognize a responsibility to seek changes in those requirements [the law] which are contrary to the best interests of the patient...shall respect the rights of patients (AMA, 2001)

Harm reduction is based on respect for the rights of people who use drugs, and the similarities between the two sets of ideologies should be highlighted to EMF staff because the central goal is the same – providing compassion and respect to all people.

Early conversations to create buy-in for syringe distribution within EMF should also focus on how the adoption harm reduction strategies will benefit staff's daily work life. Engaging with PWID through a harm reduction lens will help to build trust between provider and patient. Patients will then feel more comfortable being honest about their drug use practices and will provide a more thorough understanding of how risks can be mitigated for both EMF staff and patients.

Hospital policies and fear of potential liability issues will need to be addressed to effectively advocate and implement syringe distribution in EMF. Current state law prohibits syringe distribution, but prescribing syringes is allowable. Conversations with EMF administrators

should be focused on the benefits of adopting harm reduction strategies such as improved patient/provider relationships, reductions in compassion fatigue, as well as showcasing the cost benefits of syringe distribution as well the program's ability to improve individual and community health outcomes will be used to alleviate these concerns.

Gaining administrative approval for syringe distribution will require the identification of key medical providers and administrators in the hospital system to become “harm reduction champions” who will focus on creating buy-in for harm reduction practices with their more hesitant colleagues in the early stages of implementation. Harm reduction champions should have a basic understanding and interest in harm reduction as well as being a person with influence in the hospital setting (either in a position of power within the organization or those who are highly regarded by those they work with). Focusing on establishing trust and respect with EMF staff will be crucial in gaining meaningful participation in the educational component necessary before beginning syringe distribution.

2.2 Community Engagement

Currently in Pennsylvania, SSPs are permitted operations with approval from local county ordinances. Each ordinance lists specific requirements that must be met prior to beginning operations. The current legislation to potentially legalize SSPs does not have information regarding requirements that need to be fulfilled prior to SSP operations, instead listing specific services and education that must be available at such programs. A key obstacle to smooth operations of an SSP

are community members who do not want the program to operate near the vicinity of their home and community. Efforts should be made to engage the community prior to site operations.

Efforts should be made to engage different community providers working with PWID to make known what services will be available, the goals of the program, and how community partnerships can be made. This should include other recovery institutions, MOUD clinics, NA or other recovery focused meetings, groups providing naloxone distribution, if known, any groups or individuals doing underground syringe distribution, and individuals incorporating harm reduction efforts into their work. These organizations and individuals will be invaluable not only to helping create community buy-in but also with spreading the word about the program to reach more PWID. Many people involved in abstinence-based recovery models are supportive of harm reduction measures, but it is important to note there are also those in the recovery community who view syringe distribution as enabling.- It will be important to have honest and open conversations with people in the recovery community as to the benefits of harm reduction and syringe distribution to help mitigate some of the NIMBY (not in my backyard) mentality that has the potential to push back against harm reduction practices within emergency medical spaces.

2.3 Building Trust with PWID

A key component to gaining trust with PWID is demonstrating consistency of service (having services available at clearly listed times and locations) and the ability for PWID to provide feedback that is incorporated into the program when allowable will be key to high program utilization. The primary goal of syringe distribution is to create a safe space built on the

foundations of harm reduction so that PWID and people who use drugs more broadly will feel safe accessing services. Focus must begin with working with the staff of emergency medical facilities to provide the necessary tools to create an environment of mutual respect.

Once a safe space has been established and providers have a foundational understanding of harm reduction and its positive impact on PWID and their relationships with medical staff, then individuals involved in the project can begin building a trusting relationship with PWID. Building a trusting relationship with people who use drugs takes time and patience. This community is often mistrustful of outsiders, because of the stigma they experience due to their drug use. To have a successful program, focus should be placed on creating connections and partnerships with community members and organizations working in the drug and alcohol field, especially those with an existing understanding and support of harm reduction using a harm reduction lens, such as Sage's Army, who have existing connections with PWID to help display the work being done by EMF to better serve this community. Sage's Army is a recovery organization in Greensburg that utilizes harm reduction efforts in their group meetings and peer recovery support. Greensburg is a city in Westmoreland County, where the Census estimates the population to be 353,057 as compared to the population of Allegheny County where Pittsburgh is centered at an estimated 1,212,340 people. The best way to get the word out about EMF providing a safe space to PWID is by word of mouth. PWID who have positive experiences seeking medical services will provide this information to others in their network and self-created community. Partnerships with existing organizations already working with and have positive relationships with PWID are crucial to helping establish legitimacy within this community.

The building of this trust and having consistency in non-stigmatizing services provided at EMF will be of utmost importance in program success. Enrollment in syringe distribution will be

based on the wants of people patients utilizing EMF services. If an individual self identifies as a PWID or EMF staff identifies and has a discussion with the patient about their drug use status, the patient will be provided, if they consent or ask for, information regarding safer injection practices such as vein maintenance, discussion on current injection practices to identify where harm reduction can take place (such as what water sources someone uses when injecting leading to a discussion on the hierarchy of sterility and safety of different water sources) and will have the option to take home naloxone (opioid overdose-reversing drug), other harm reduction materials, and will be referred to primary harm reduction staffing to enroll in syringe distribution program.

2.4 Education of EMF Staff

Prior to beginning syringe distribution at EMF, staff of emergency medical facilities must undergo training to ensure understanding of harm reduction practices. The author recommends a series of four trainings over a two-month period that focus on the unique health needs of PWID, the principles of harm reduction, and how to implement harm reduction strategies including safer injection education and syringe distribution. Education should also discuss how syringe distribution will lead to workload reduction and improved patient health, resulting in fewer emergency medical visits and reduced health care costs. Evaluation measures should be included to gauge knowledge of harm reduction and attitudes of EMF staff on PWID, most easily conducted through pre and post-training surveys. A specialized social work team (two social workers and two harm reduction specialists) will be created. These individuals will also undergo training on the unique needs of PWID to assist patients who inject drugs access outside services with a focus on

patient-centered goals, warm referrals to outside resources, and provide other supports for program participants as they navigate the process.

Training should be informed and conducted by people who have previously worked at SSPs to provide an insider's perspective into best practices. There are many available trainings that can also be used for training or as basis for training material. The National Harm Reduction Coalition, the Pennsylvania Harm Reduction Network, and existing SSPs within Pennsylvania (Prevention Point Pittsburgh and Prevention Point Philadelphia) should all be reached out to and engaged within the training and implementation processes. The National Harm Reduction Coalition also provides technical support to newly formed SSPs. Additionally, medical staff who currently provide harm reduction focused engagement with patients should be asked to participate in training creation or if available, to be a part of the buy-in process with hospital administrators and head medical staff. An organization like the Center of Inclusion Health at Allegheny General Hospital, board members of existing SSPs who work in medical settings, and individuals who volunteer with an SSP with medical expertise should also be consulted and participate in some way to help create buy-in and to relate on a peer level with those undergoing training.

Training should be available to all employees of EMF who interact with patients if possible, including doctors, nurses, physician assistants, security, and reception staff, among others. Stigma toward PWID can be perpetrated at all levels of interaction in the emergency facility setting, and oftentimes people forget or do not realize when they can be heard by patients, creating a stigmatized experience for PWID without any direct interaction.

At least one of the training sessions must cover how to talk to PWID about their drug use. Even within medical settings, feelings of discomfort and unease can exist when asking someone about substance use. Focus should be placed on asking people about their injection practices once

an individual has been identified as a PWID. The process of outing oneself as a person who uses drugs may bring up feelings of fear, so emphasis on nonjudgement must be conveyed to patients. SSPs have questions asked of PWID when first engaging with a program, and these questions should be utilized in medical settings. Example questions include “do you clean your skin before injecting,” “do you reuse or share your cookers,” “do you ever share or reuse syringes,” and “how many times a day do you inject.” See Figure 1 for the full list of questions used by Prevention Point Pittsburgh with first-time program participants. These questions will inform the conversation around safer injection practices and potential risk reduction behaviors for the patient.

2.5 Flow of Operations

Syringes and naloxone should be prescribed to patients on-site after confirmation of injection drug use, consent of the patient to discuss drug use behaviors, and education around safer injection behaviors and services available to the patient, such as the ability to prescribe MOUD and connections to peer supports of social workers referrals. Syringe prescription can take place at time of EMF interaction. It is also recommended that EMF employ several staff members dedicated to harm reduction efforts and to offer syringe distribution at regular times within the EMF. When beginning programming, it is recommended that EMF staff two harm reduction specialists (who understand safer injection practices and harm reduction), two harm reduction social workers, and a project manager to conduct syringe service programming within the EMF. At point of first encounter, EMF staff will then be able to refer individuals to regularly scheduled syringe distribution points. Once syringe distribution begins, program participants should be

formally surveyed in an anonymous manner at least twice per year to ensure that they are receiving high-quality, non-judgmental healthcare from EMF staff as well as ideas on program improvements, requests for additional supplies, and other needs. More informal survey options will be available throughout the entirety of the program through anonymous online surveys, an anonymous comment box at EMF, and through open conversations with program staff.

EMF staff should be surveyed throughout the first year of syringe distribution operations to gauge improvements in compassion fatigue, burn-out as it relates to relationships with patients who use injection drugs, as well as maintenance of understanding and practice of harm reduction materials. These surveys should be utilized for programmatic improvements. Best practices for syringe distribution and programming are well established and should be utilized in EMF settings. Consulting existing programs such as Prevention Point Pittsburgh, Prevention Point Philadelphia, The National Harm Reduction Coalition, and the Pennsylvania Harm Reduction Network will be invaluable in establishing best practices. Some best practices include consistency of services, anonymity and confidentiality of program participants, and non-judgmental services at all levels of interactions with PWID. The number of syringes available to a patient should be unlimited to ensure that a new syringe is used with every injection as well as to prevent the sharing of syringes. Biohazard containers should also be available for patients, and patients should be able to return used syringes to the EMF for proper disposal.

2.6 Sustainability

Costs associated with syringe service programming are low. Educational materials and trainings should be recorded for future use with new employees of EMF, and syringes can be prescribed making that a no-cost element for EMF. A case of 500 syringes costs approximately \$40, making it a low-cost purchasing item. The main continuing costs will be in-house SSP staff. If the program is successful, healthcare costs associated with injection infections will be lowered, saving EMF money. Additionally, SSP social workers should help with insurance enrollment for program participants currently without insurance, helping save additional dollars. EMF should put costs saved back into the program, helping to fund these positions.

The following are suggestions on program evaluation measures for consideration. It is important to record the number of participants enrolled in the program alongside some basic demographic information, such as age, race, gender, supplies received (such as the number of syringes and doses of naloxone), and neighborhood of residence as well as to know the number of interactions per year by individuals. Syringe service programs are often anonymous and assign an anonymous code, containing no personally-identifying information. Prevention Point Pittsburgh for example uses a code comprised of the first two letters of the participant's mother's first name and the day and year of birth, not the month. While the first interaction with PWID primarily will take place in an emergency facility setting, I recommend that the established syringe service program within the hospital utilize this type of code. If that is not possible, I encourage establishing a system that requires very little personally-identifying information and that ensures the confidentiality of participants. Due to the stigma experienced by PWID, there are concerns that

individuals will not enroll in the program or will only utilize services once due to the fears of being outed as a person who uses drugs.

This information can be used as a measure of success by looking at the number of unique participants and interactions conducted, the frequency participants receive services, and the geographic neighborhoods with the most and least number of program participants. It can also be used to make improvements to the program and help with targeting future marketing efforts if ever needed. The return of individuals for use of services can be an indicator of trust-building, while also can be a signifier of the need to increase the number of supplies distributed during each interaction. If possible, I recommend that program participants get as many supplies as they need. Having conversations around how often people inject per day and what kinds of transportation people have as well as transportation needs are important considerations for how many syringes a person needs. The goal of syringe distribution is to give an individual as many syringes as they need to prevent reuse, and transportation access needs to be taken into account, as well as how many other people an individual is distributing syringes to on their own time. Knowing the geographic location of individuals served can be very valuable when looking to find potential program funders and can create the potential to find new community partners and collaborators.

Programs should also measure the change in the number of EMF patients seen for injection infections, such as endocarditis and abscesses related to injection. This is an important number to examine, but it is also important to remember that the reduction in number will most likely be small in the first place. This number could also potentially increase in the first couple of years of operation as PWID share their positive experiences with their community, leading to people going to the EMF who may have not done so previously. Program participants can be surveyed on questions related to improvements around their injection practices, such as how often veins are

rotated, improvements in vein care and ability to locate them, see if people have needed to reuse or share syringes after program enrollment and what improvements the program can make to decrease how often people share or reuse syringes. Program participants should also be asked about improvements with medical services in EMF to help ensure stigma reduction.

Many measures of success can be found in conversations, such as asking people who are receiving naloxone refills if the naloxone previously received was used to reverse an overdose. This provides documentation on the number of potential lives saved and contributes to data on the importance of giving PWID and PWUD more broadly naloxone directly. These conversations around naloxone use also provide the potential for building trust and respect by having an honest conversation with a PWID, getting the opportunity to tell a highly stigmatized individual that they saved a life, and to thank a participant for taking care of their community members. While these last suggested measures are primarily to build trust and relationships, these stories can also be used (anonymously) with funders to showcase the people behind the numbers and to give a voice to your data, which I believe is underutilized.

3.0 Conclusions

In order to effectively decrease the overdose epidemic in Pennsylvania, harm reduction measures must be used and adopted widely throughout the state. When adopting and implementing harm reduction measures in rural parts of the state, modifications must be made to ensure access to sterile supplies for rural PWID due to the needs and obstacles of these communities. It is imperative to consider how to effectively engage PWID through providing low-threshold services, building trust through consistency of services, providing non-stigmatizing and compassionate healthcare, and centering individual needs as opposed to the desires of a provider.

Before beginning any of the work and distribution, individuals working with PWID or PWUD more broadly, providers must be willing to do the work to unlearn the personal biases on drug use and help to destigmatize PWUD in the public health and medical fields. Incorporating harm reduction methods and training with providers will help facilitate the process of providing the compassionate care that PWID and PWUD deserve.

This paper is focused on how to implement change within the emergency medical community to eliminate the biases of drug use to work towards better health outcomes for PWUD, reduction of overdose deaths, and of compassion fatigue within the medical provider community. Harm reduction is a way for people to change the ways we act and care for one another and allows us to consider the ways in which we care for ourselves. The biases previously discussed are not only found within the medical community. They are found in educational institutions, methadone programs, AA meetings, detox programs, board meetings, at bus stops, among firefighters, police, and your neighbor next door. It is our duty as public health professionals to lead by example, to

educate the public, and to do the work within ourselves to unlearn the prejudices we carry. Implementing harm reduction programming within EMF will undoubtedly improve health outcomes and reduce deaths, but there is so much more work to be done. Any overdose death is one too many. 100,000 over a one-year period is entirely unacceptable, and we must do better.

4.0 Figures

Risk Reduction Questions

Skin Prepping

Do you clean your skin before injecting?
 Yes No N/A

Cottons/Filters

Do you share cottons/filters with other people?
 Yes No N/A

Do you reuse your personal cottons/filters?
 Yes No N/A

Cookers

Do you share cookers with other people?
 Yes No N/A

If **YES**, do you bleach the cooker before using it?
 Yes No N/A

If **NO**, do you reuse your personal cookers?
 Yes No N/A

If **DO REUSE** a personal cooker, do you bleach it?
 Yes No N/A

If **YES**, how often do you bleach it?
 Each Time Periodically N/A

Syringes

Do you share syringes with other people?
 Yes No N/A

If **YES**, do you bleach the syringe before using it?
 Yes No N/A

If **NO**, do you reuse your personal syringes?
 Yes No N/A

If **DO REUSE** a personal syringe, do you bleach it?
 Yes No N/A

If **YES**, how often do you bleach it?
 Each Time Periodically N/A

Figure 1 Prevention Point Pittsburgh Risk Reduction Questionnaire

Bibliography

- 1972 Act 64. The official website for the Pennsylvania General Assembly. (n.d.). Retrieved April 25, 2022, from <https://www.legis.state.pa.us/cfdocs/Legis/LI/uconsCheck.cfm?txtType=HTM&yr=1972&sessInd=0&smthLwInd=0&act=0064>
- AMA Code of Medical Ethics - American Medical Association. American Medical Association. (2001, June). Retrieved April 25, 2022, from <https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/principles-of-medical-ethics.pdf>
- Biancarelli, D. L., Biello, K. B., Childs, E., Drainoni, M., Salhaney, P., Edeza, A., Mimiaga, M. J., Saitz, R., & Bazzi, A. R. (2019). Strategies used by people who inject drugs to avoid stigma in healthcare settings. *Drug and Alcohol Dependence, 198*, 80–86. <https://doi.org/10.1016/j.drugalcdep.2019.01.037>
- Brooks, H. L., O'Brien, D. C., Salvalaggio, G., Dong, K., & Hyshka, E. (2019). Uptake into a bedside needle and syringe program for Acute Care Inpatients who inject drugs. *Drug and Alcohol Review, 38*(4), 423–427. <https://doi.org/10.1111/dar.12930>
- Browne, P., Williams, A., Mensch, B., Costa, J., Schwank, J., Kearney, T., Cappalletti, A., & Fontana, W. (2021, November 1). SENATE BILL No. 926 Session of 2021 . Retrieved April 25, 2022, from <https://www.legis.state.pa.us/cfdocs/legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2021&sessInd=0&billBody=S&billTyp=B&billNbr=0926&pn=1193>
- Centers for Disease Control and Prevention. (2019, May 23). *Summary of information on the safety and effectiveness of Syringe Services Programs (ssps)*. Centers for Disease Control and Prevention. Retrieved April 25, 2022, from <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>
- Centers for Disease Control and Prevention. (2021, November 17). *Drug overdose deaths in the U.S. top 100,000 annually*. Centers for Disease Control and Prevention. Retrieved April 25, 2022, from https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2021/20211117.htm
- Death data overview. OverdoseFreePA. (n.d.). Retrieved April 25, 2022, from <https://www.overdosefreepa.pitt.edu/know-the-facts/death-data-overview/>
- Dhanani, L. Y., & Franz, B. (2021). Attitudes toward and experiences working with patients who misuse opioids among board certified physicians in Ohio. *Substance Abuse, 42*(4), 466–470. <https://doi.org/10.1080/08897077.2021.1901172>

- Feldman, N. (2019, October 30). *Syringe Exchange saved billions in HIV-related costs in Philly, study finds*. WHYY. Retrieved April 25, 2022, from <https://whyy.org/articles/syringe-exchange-saved-billions-in-hiv-related-costs-in-philadelphia-study-finds/>
- Hawk, K., McCormack, R., Edelman, E. J., Coupet, E., Toledo, N., Gauthier, P., Rotrosen, J., Chawarski, M., Martel, S., Owens, P., Pantaloni, M. V., O'Connor, P., Whiteside, L. K., Cowan, E., Richardson, L. D., Lyons, M. S., Rothman, R., Marsch, L., Fiellin, D. A., & D'Onofrio, G. (2022). Perspectives about emergency department care encounters among adults with opioid use disorder. *JAMA Network Open*, 5(1). <https://doi.org/10.1001/jamanetworkopen.2021.44955>
- Kaiser Family Foundation. (2022, May 9). *Opioid overdose deaths by race/ethnicity*. KFF. Retrieved April 11, 2022, from <https://www.kff.org/other/state-indicator/opioid-overdose-deaths-by-raceethnicity/?dataView=1&Timeframe=0&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D>
- Kopko, K. C. (2021, May 26). Center for Rural Pennsylvania: Pennsylvania Senate State Government Committee Hearing May 26, 2021. PA Senate GOP
- Lambdin, B. H., Bluthenthal, R. N., Wenger, L. D., Wheeler, E., Garner, B., Lakosky, P., & Kral, A. H. (2020). Overdose education and naloxone distribution within syringe service programs — United States, 2019. *MMWR. Morbidity and Mortality Weekly Report*, 69(33), 1117–1121. <https://doi.org/10.15585/mmwr.mm6933a2>
- Legan, M. (2021, June 3). *Indiana needle exchange that helped contain a historic HIV outbreak to be shut down*. NPR. Retrieved April 25, 2022, from <https://www.npr.org/sections/health-shots/2021/06/01/1001278712/indiana-needle-exchange-that-helped-contain-an-hiv-outbreak-may-be-forced-to-clo>
- Masson, C. L., Sorensen, J. L., Perlman, D. C., Shopshire, M. S., Delucchi, K. L., Chen, T. C., Sporer, K., Des Jarlais, D., & Hall, S. M. (2007). Hospital- versus community-based Syringe Exchange: A randomized controlled trial. *AIDS Education and Prevention*, 19(2), 97–110. <https://doi.org/10.1521/aeap.2007.19.2.97>
- Ondocsin, J., Mars, S. G., Howe, M., & Ciccarone, D. (2020). Hostility, compassion and role reversal in West Virginia's long opioid overdose emergency. *Harm Reduction Journal*, 17(1). <https://doi.org/10.1186/s12954-020-00416-w>
- The Opioid Threat in Pennsylvania*. DEA.gov. (2018, September). Retrieved April 28, 2022, from <https://www.dea.gov/sites/default/files/2018-10/PA%20Opioid%20Report%20Final%20FINAL.pdf>

- Orkis, L., Carr, M., Waller, K., & Watkins, S. (2020). (rep.). *Assessment of Hepatitis C Related Services in Pennsylvania Drug and Alcohol Facilities*. Pennsylvania Department of Health Bureau of Epidemiology Division of Infectious Disease Epidemiology. Retrieved April 11, 2022, from <https://www.health.pa.gov/topics/Documents/Diseases%20and%20Conditions/DOH%20DAP%20Hepatitis%20C%20Survey%20Report.pdf>
- Overdose risks & prevention*. National Harm Reduction Coalition. (2020, September 1). Retrieved April 25, 2022, from <https://harmreduction.org/issues/overdose-prevention/overview/overdose-basics/opioid-od-risks-prevention/>
- PA DOS. (2010, April). Prescriptions No Longer Required for Sales of Needles and Syringes. *Dos.pa.gov*. Retrieved April 11, 2022, from <https://www.dos.pa.gov/ProfessionalLicensing/LicensingServices/2010/PharmacyApril2010.pdf>
- Palepu, A., Tyndall, M. W., Leon, H., Muller, J., O'Shaughnessy, M. V., Schechter, M. T., & Anis, A. H. (2001). Hospital utilization and costs in a cohort of injection drug users. *Canadian Medical Association Journal*, 165(4), 415–420
- Penn Medicine News. (2018, November 1). *Cluster of Cocaine-Fentanyl Overdoses in Philadelphia Underscores Need for More “Test Strips” and Rapid Response*. Retrieved April 25, 2022, from <https://www.pennmedicine.org/news/news-releases/2018/november/cocaine-fentanyl-overdoses-in-philadelphia-need-more-test-strips-and-rapid-response>
- Pennsylvania Department of Health. (n.d.). Fatal and Non-fatal Drug Overdoses in Pennsylvania, 2020
- Pennsylvania Department of Health. (n.d.). *Fatal and non-fatal drug overdoses in Pennsylvania, 2020*. www.health.pa.gov. Retrieved April 25, 2022, from <https://www.health.pa.gov/topics/Documents/Programs/PDMP/Pennsylvania%20Overdose%20Data%20Brief%202020.pdf>
- Pennsylvania General Assembly. (n.d.). *2014 Act 139*. The official website for the Pennsylvania General Assembly. Retrieved April 25, 2022, from <https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2014&sessInd=0&act=139>
- Pennsylvania ODSMP – Drug Overdose Surveillance Interactive Data Report*. Free data visualization software. (2022, January 21). Retrieved April 25, 2022, from <https://public.tableau.com/app/profile/pennsylvania.pdmp/viz/PennsylvaniaODSMPDrugOverdoseSurveillanceInteractiveDataReport/Contents>

- Pittsburgh EMS Becomes Third in the Country to Provide Lifesaving Prehospital Buprenorphine for Opioid Overdoses. (2021, November 22). *The City of Pittsburgh*. Retrieved April 25, 2022, from <https://pittsburghpa.gov/press-releases/press-releases/5486>
- Prevention Point Philadelphia. (n.d.). *Step - Prevention Point Philadelphia*. Prevention Point Philadelphia. Retrieved April 25, 2022, from <https://ppponline.org/node/125/step>
- Rural Quick Facts*. Rural Quick Facts - Center for Rural PA. (n.d.). Retrieved April 25, 2022, from <https://www.rural.pa.gov/data/rural-quick-facts>
- Samhsa announces unprecedented \$30 million harm reduction grant funding opportunity to help address the nation's substance use and overdose epidemic*. SAMHSA. (2021, December 8). Retrieved April 25, 2022, from <https://www.samhsa.gov/newsroom/press-announcements/202112081000>
- Samuels, E. A., Dwyer, K., Mello, M. J., Baird, J., Kellogg, A. R., & Bernstein, E. (2016). Emergency department-based opioid harm reduction: Moving physicians from willing to doing. *Academic Emergency Medicine*, 23(4), 455–465. <https://doi.org/10.1111/acem.12910>
- Short, E., Waller, K., Orkis, L., Ma, M., & Watkins, S. (2020, February 5). *Public Health Impacts of the Opioid Epidemic: Vulnerability to Bloodborne Infections and Overdose Death*. health.pa.gov. Retrieved April 25, 2022, from <https://www.health.pa.gov/topics/Documents/Opioids/Vulnerability%20Assessment%20Report.pdf>
- SSA Patrick Trainor. (2018, August 21). DEA Announces 5,456 Drug-Related Overdose Deaths in Pennsylvania in 2017. *www.dea.gov*. Retrieved April 25, 2022, from <https://www.dea.gov/press-releases/2018/08/21/dea-announces-5456-drug-related-overdose-deaths-pennsylvania-2017-0>
- Strathdee, S. A., & Vlahov, D. (2021, December). *The effectiveness of needle exchange programs: A review of the science and policy*. AIDS Science Prevention and Vaccine Research. Retrieved April 25, 2022, from <http://www.aidsscience.org/Articles/aidsscience013.asp>
- Stimson, G. V., Alldritt, L., Dolan, K., & Donoghoe, M. (1988). Syringe Exchange Schemes for drug users in England and Scotland. *BMJ*, 296(6638), 1717–1719. <https://doi.org/10.1136/bmj.296.6638.1717>
- Ti, L., & Kerr, T. (2013). Task shifting redefined: Removing social and structural barriers to improve delivery of HIV services for people who inject drugs. *Harm Reduction Journal*, 10(1), 20. <https://doi.org/10.1186/1477-7517-10-20>

Twohey, M. (2016, August 7). *Mike Pence's response to H.I.V. outbreak: Prayer, then a change of heart*. The New York Times. Retrieved April 25, 2022, from <https://www.nytimes.com/2016/08/08/us/politics/mike-pence-needle-exchanges-indiana.html>

U.S. Census Bureau quickfacts: Pennsylvania. US Census Bureau. (n.d.). Retrieved April 25, 2022, from <https://www.census.gov/quickfacts/PA>

Vivolo-Kantor, A. M., Seth, P., Gladden, R. M., Mattson, C. L., Baldwin, G. T., Kite-Powell, A., & Coletta, M. A. (2018, March 6). *Vital signs: Trends in emergency department visits for suspected opioid overdoses - United States, July 2016-September 2017*. MMWR. Morbidity and mortality weekly report. Retrieved April 25, 2022, from <https://pubmed.ncbi.nlm.nih.gov/29518069/>